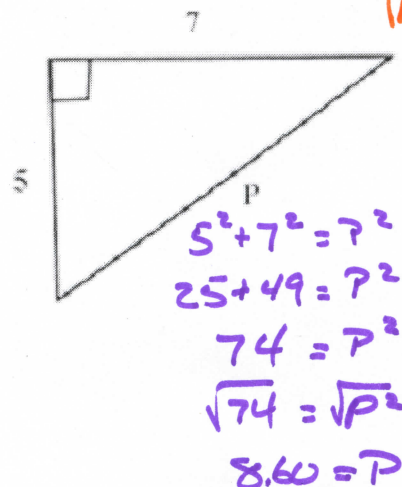
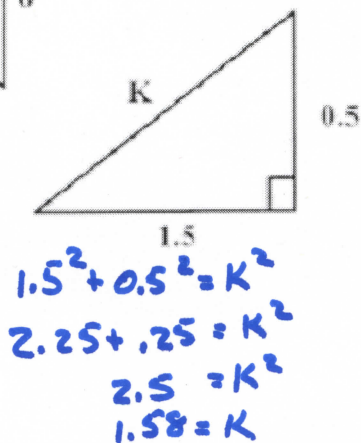
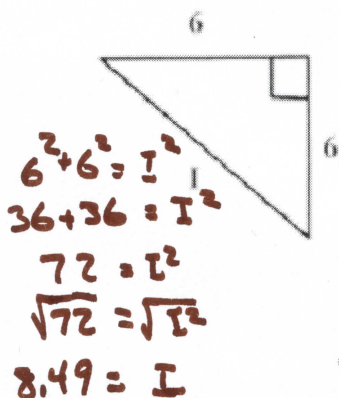
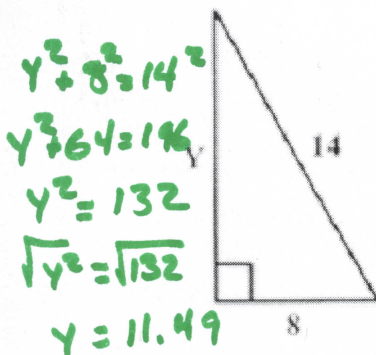
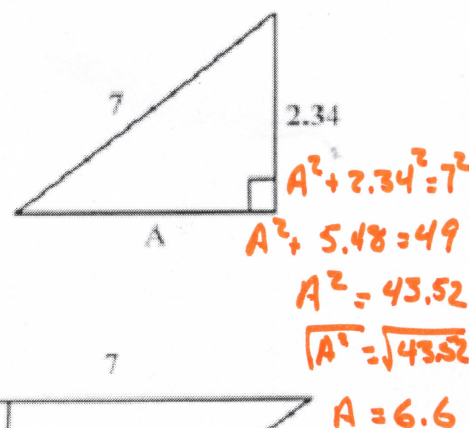
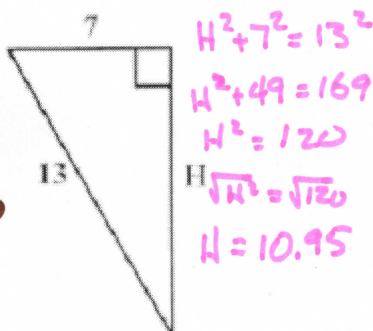
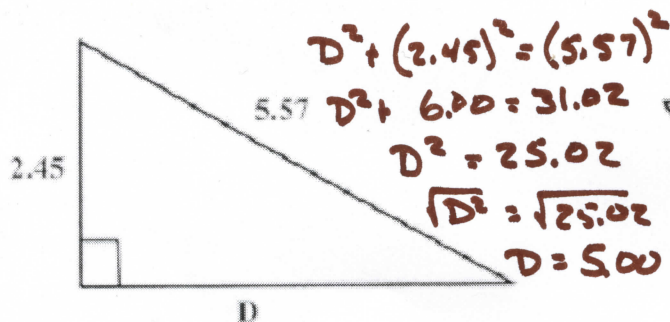
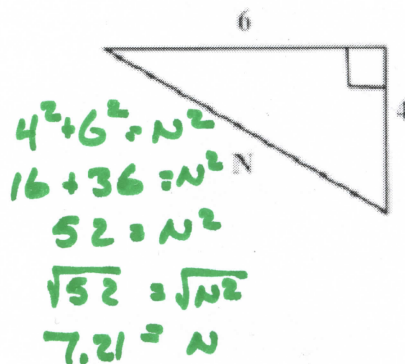
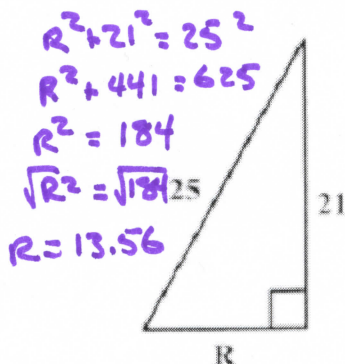
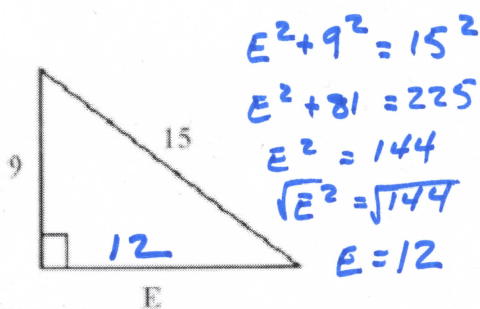


Geometry Unit 7 Worksheet #1 – Pythagorean Theorem

Solve for the missing side of the right triangle using Pythagorean Theorem. Round your answer to the nearest hundredths place. To find the answer to the joke, place the letter of each problem in the space above the answer. You will not use all of the spaces.

WHERE IS THE BEST PLACE TO PLAY HIDE AND SEEK?



| | | | | | | | | | | | |
|----------|----------|------|----------|----------|----------|----------|---|----------|----------|----------|----------|
| <u>I</u> | <u>N</u> | | <u>H</u> | <u>Y</u> | <u>D</u> | <u>E</u> | | <u>P</u> | <u>A</u> | <u>R</u> | <u>K</u> |
| 8.49 | 7.21 | 1.66 | 10.95 | 11.49 | 5.00 | 12 | 2 | 8.60 | 6.6 | 13.56 | 1.58 |

The Converse of the Pythagorean Theorem

The Pythagorean Theorem can also be used to determine whether any triangle is acute, right, or obtuse.

I. Find two shorter sides, square each, add the squares.

II. Square the longest side.

III. Compare the results:

$$\text{longest side}^2 < \text{short side}^2 + \text{short side}^2 \Rightarrow \text{ACUTE}$$

$$\text{longest side}^2 = \text{short side}^2 + \text{short side}^2 \Rightarrow \text{RIGHT}$$

$$\text{longest side}^2 > \text{short side}^2 + \text{short side}^2 \Rightarrow \text{OBTUSE}$$

Determine whether the following lengths create an acute, right, or obtuse triangle. Check the corresponding column in the chart and write its letter in the blanks below.

| LENGTHS | | ACUTE | RIGHT | OBTUSE |
|---------|------------|-------|-------|--------|
| 1. | 3, 4, 5 | A | T | D |
| 2. | 9, 9, 13 | I | P | H |
| 3. | 11, 11, 15 | E | S | M |
| 4. | 7, 7, 7 | T | A | C |
| 5. | 6, 8, 10 | U | R | H |
| 6. | 8, 10, 12 | I | L | S |
| 7. | 4, 6, 8 | A | Z | P |
| 8. | 5, 12, 13 | M | L | N |
| 9. | 8, 14, 17 | T | I | E |
| 10. | 6, 7, 8 | J | H | O |
| 11. | 9, 12, 15 | E | U | L |
| 12. | 13, 14, 15 | M | O | N |
| 13. | 7, 8, 11 | S | U | P |

U.S. Olympian Mike Conley won

a silver medal in the 1984

Summer Olympics and a gold medal

for the same event in the 1992

Summer Olympics. In which

event did he compete?

T H E

T R I P L E

J U M P